UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,024	01/21/2005	Francis J. Scahill	36-1881	1512

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EXAMINER
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ART UNIT	PAPER NUMBER
2626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/522,024	SCAHILL ET AL.
	Examiner	Art Unit
	Natalie Lennox	2626

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>*22 January 2005*</u>.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>*1-14*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>*1-14*</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>*22 January 2005*</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some * c) ☐ None of:

        1. ☒ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1.   The listing of references in the specification is not a proper information disclosure

statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other

information submitted for consideration by the Office, and MPEP § 609.04(a) states,

"the list may not be incorporated into the specification but must be submitted in a

separate paper." Therefore, unless the references have been cited by the examiner on

form PTO-892, they have not been considered.

Specification

1.   The disclosure is objected to because it contains an embedded hyperlink and/or

other form of browser-executable code. Applicant is required to delete the embedded

hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1, 7, 8, and 14 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Jebara et al. ("Tracking Conversational Context for Machine

Mediation of Human Discourse," 2000) in view of Suomela et al. (US 2002/0077830).

As per claims 1 and 8, Jebara et al. teach an information interface system and method, comprising:

speech recognition means arranged to listen to voice signals carried on a communications channel between a user and another person, and to recognise at least one or more predefined keywords or phrases contained within the voice signals (**System Overview**, lines 1-6, speech recognizer which detects words);

keyword processing means arranged to relate any recognised keywords or phrases to items of information stored in an information database so as to identify relevant items of information thereto (**Implementation** and **System Overview**, whole paragraphs); and

information display means arranged to display any items of information and/or links thereto identified by the keyword processing means to the user (**System Overview**, lines 1-14, wherein the large projection screen is the display means, which provides feedback to the users).

However, Jebara et al. does not specifically mention the information interface system comprising:

speech recognition control means arranged to activate or deactivate the speech recognition means in response to one or more predetermined criteria.

Conversely, Suomela et al. teach a speech recognition control means arranged to activate or deactivate the speech recognition means in response to one or more predetermined criteria (Paragraphs [0009] and [0012]).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the feature of a speech recognition control means arranged to activate or deactivate the speech recognition means in response to one or more predetermined criteria as taught by Suomela for Jebara's system because Suomela provides a speech recognition system, which is automatically activated when needed, also with the speech recognition feature not always on, the resources of the device are not constantly being used (Suomela's paragraph [0012]).

As per claims 7 and 14, Jebara et al. in view of Suomela et al., teach a system and method according claims 1 and 8, wherein the predetermined criteria are selected such that the speech recognition means is deactivated on that portion or portions of the voice signals which are not expected to contain keywords or phrases (Suomela's paragraph [0012], wherein "the device is used and the speech recognition is turned off when it is not needed.").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the feature of the speech recognition means is deactivated on that portion or portions of the voice signals which are not expected to contain keywords or phrases as taught by Suomela for Jebara's system because Suomela provides a speech recognition system, which is automatically activated when needed, also with the speech recognition feature not always on, the resources of the device are not constantly being used (Suomela's paragraph [0012]).

4.   Claims 2-6, and 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Jebara et al. ("Tracking Conversational Context for Machine Mediation of Human

Discourse," 2000) in view of Suomela et al. (US 2002/0077830) as applied to claims 1

and 8 above, and further in view of Rhodes et al. ("Just-in-time information retrieval

agents," July 2000).

As per claims 2 and 9, Jebara et al. in view of Suomela et al., teach a system

and method according to claims 1 and 8, but they do not specifically mention wherein

the keyword processing means further comprises:

storage means for storing item definition data defining the items of information in

the information database; item matching means for matching recognised keywords or

phrases to the item definition data; and item scoring means for keeping an item score

for each item of information in dependence upon the number of keywords or phrases

matched to each item.

However, Rhodes et al. teach

storage means for storing item definition data defining the items of information in

the information database (Page 1, 2nd paragraph, "The information a JITIR agent

provides can come from any number of preindexed databases of documents.");

item matching means for matching recognised keywords or phrases to the item

definition data (Page 8, 2nd paragraph, "given a query, it produces a rank-ordered list of

preindexed documents that best match the query");

and item scoring means for keeping an item score for each item of information in

dependence upon the number of keywords or phrases matched to each item (Page 8,

2nd paragraph, "given a query, it produces a rank-ordered list of preindexed documents that best match the query").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the features of storage means, item matching means and item scoring means as taught by Rhodes et al. for Jebara's system, as modified by Suomela, because Rhodes provides an information retrieval agent (JITIR) that retrieves and presents information based on a person's local context (Page 1, 1st paragraph/abstract), and which can also be based on automatic speech recognition (Page 6, 4th paragraph, "one such technique is ASR, which is now accurate enough so that information retrieval on a database of raw audio news stories....").

As per claims 3 and 10, Jebara et al., in view of Suomela et al. and Rhodes et al., teach a system and method according to claims 2 and 9, wherein the keyword processing means further comprises item sorting means arranged to sort the items of information in dependence on the respective item scores (Rhodes' Page 8, 2nd paragraph, "given a query, it produces a rank-ordered list of preindexed documents that best match the query," also Page 4, 2nd paragraph, "all summary lines also include a relevance score, consisting of zero, one, or two plus signs.").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the feature of item sorting means arranged to sort the items of information in dependence on the respective item scores as taught by Rhodes et al. for Jebara's system, as modified by Suomela, because Rhodes provides an information retrieval agent (JITIR) that retrieves and presents information based on a

person's local context (Page 1, 1st paragraph/abstract), and which can also be based on automatic speech recognition (Page 6, 4th paragraph, "one such technique is ASR, which is now accurate enough so that information retrieval on a database of raw audio news stories....").

As per claims 4 and 11, Jebara et al. in view of Suomela et al. and Rhodes et al., teach a system and method according to claims 2 and 8, wherein the keyword processing means further comprises item score thresholding means arranged to apply at least one threshold to the item scores, wherein those items whose item scores do not meet the threshold are not made available to the user (Rhodes' Page 4, 2nd paragraph, "All summary lines also include a relevance score, consisting of zero, one, or two plus signs. By default, if a suggestion is below a minimum threshold, it is not displayed, and "no suggestion" is shown instead.").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the feature of item score thresholding means arranged to apply at least one threshold to the item scores, wherein those items whose item scores do not meet the threshold are not made available to the user as taught by Rhodes et al. for Jebara's system, as modified by Suomela, because Rhodes provides an information retrieval agent (JITIR) that retrieves and presents information based on a person's local context (Page 1, 1st paragraph/abstract), and which can also be based on automatic speech recognition (Page 6, 4th paragraph, "one such technique is ASR, which is now accurate enough so that information retrieval on a database of raw audio news stories....").

As per claims 5 and 12, Jebara et al. in view of Suomela et al., teach a system and method according to claims 1 and 8, however they do not specifically mention wherein the information display means is arranged to display the items of information and/or links thereto as a hierarchical structure, which preferably matches the hierarchy of the information database. Conversely, Rhodes et al. teach information display means arranged to display the items of information and/or links thereto as a hierarchical structure, which preferably matches the hierarchy of the information database (Rhodes' Page 3, 6th paragraph, "The RA continually presents a list of documents that are related to the current document being written or read. These suggestions appear in order of relevance within a special display buffer at the bottom of the Emacs window.").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the feature of information display means arranged to display the items of information and/or links thereto as a hierarchical structure, which preferably matches the hierarchy of the information database as taught by Rhodes et al. for Jebara's system, as modified by Suomela, because Rhodes provides an information retrieval agent (JITIR) that retrieves and presents information based on a person's local context (Page 1, 1st paragraph/abstract), and which can also be based on automatic speech recognition (Page 6, 4th paragraph, "one such technique is ASR, which is now accurate enough so that information retrieval on a database of raw audio news stories....").

As per claims 6 and 13, Jebara et al. in view of Suomela et al., teach a system and method according claims 1 and 8, however they do not specifically mention wherein

the speech recognition means, the keyword processing means and the information

display means are substantially continuously or periodically operable so as to

continually or periodically update the items of information and/or links thereto displayed

to the user. Conversely, Rhodes teaches speech recognition means, the keyword

processing means and the information display means are substantially continuously or

periodically operable so as to continually or periodically update the items of information

and/or links thereto displayed to the user (Rhodes' Page 3, 6th paragraph).

It would have been obvious to one having ordinary skill in the art at the time the

invention was made to have used the feature of speech recognition means, the keyword

processing means and the information display means are substantially continuously or

periodically operable so as to continually or periodically update the items of information

and/or links thereto displayed to the user as taught by Rhodes et al. for Jebara's

system, as modified by Suomela, because Rhodes provides an information retrieval

agent (JITIR) that retrieves and presents information based on a person's local context

(Page 1, 1st paragraph/abstract), and which can also be based on automatic speech

recognition (Page 6, 4th paragraph, "one such technique is ASR, which is now accurate

enough so that information retrieval on a database of raw audio news stories....").

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Natalie Lennox whose telephone number is (571) 270-

1649. The examiner can normally be reached on Monday to Friday 9:30 am - 7 pm

(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil can be reached on (571)272-7602. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NL   09/11/2007

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER